YAMAP0347USD

Serial No. 09/760,950

REMARKS

Upon entry of the present amendment, claims 1-7 are pending in the present application. Claims 16-27 have been canceled previously. Claim 1 is amended herein, to more particularly point out and distinctly claim Applicants' invention. Support for the amendment of claim 1 may be found, for example, in the specification from page 24, line 28 to page 25, line 4, which discloses that the magnetic sheets 1, 3 and 6 are pressed together with heat and pressure to form the integral body.

Rejection of Claims 1-7 over Tashiro et al. in view of Hirohashi.

Claims 1-7 stand rejected as obvious over Tashiro et al., U.S. Patent No. 5,515,022, in view of Hirohashi, JP 6-112047). In response to Applicants' previous amendments and arguments, the Examiner asserted that Applicants' arguments are not persuasive, and the Examiner argued that "Tashiro discloses the insulating layers in contact with the conductor pattern", citing Fig. 2 of Tashiro. The Examiner argued that "applicant claims do not preclude a gap between the insulating layers in the area that is not in contact with the conductor." The Examiner argued that "Tashiro discloses the width to thickness ratio, as claimed." The Examiner contended that "Tashiro in view of Hirohashi discloses the product, as claimed." Finally, the Examiner contended that "applicant has failed to provide sufficient proof and evidence of experimentation to show that Tashiro does not show the claimed thickness to width ratio."

Applicants respectfully traverse the rejection of Applicants' claims; Applicants submit that the Examiner's view of the evidence is in error; and Applicants submit that the presently submitted claims fully distinguish over the asserted combination of Tashiro and Hirohashi, for both the previously submitted reasons and based on the claims as amended herein and on the following points.

With particular reference to the Examiner's point [2], Applicants submit that the claims as presently amended clearly recite that the conductive pattern is interposed between a pair of insulation layers so as to be in contact with the pair of insulating layers. This feature clearly distinguishes over Tashiro and Hirohashi which, as shown by Applicants' previously submitted Declarations, actually results in the formation of a gap between the conductive pattern and the insulating layer formed thereover. This fact was clearly shown in Fig. A on page 8 of the Declaration of inventor Eiichi Uriu, dated March 7, 2002, which was submitted by Applicants in the present application. As shown in Fig. A on page 8 of the Declaration, the conductive pattern (2) is not in contact with both of the pair of insulation layers (1). Instead there is a gap (3) formed between the conductive pattern and the top insulation layer.

Based on the facts clearly shown in Applicant's Declarations, Applicants again respectfully submit that the prior art would not have formed the structure obtained by Applicants' claimed method. The prior art would have formed a gap, and Applicants' claimed product formed by the specified process would not have such a structure.

Claim 1 is a product-by-process claim. Such claims are to be interpreted such that the structure of the claimed product resulting from the specified process must be different from a prior art product formed by the prior art process. Thus, the conductive pattern obtained by the present product-by-process claim must be patentably distinct from a product formed by another process.

Applicants' Declarations have clearly shown, with straightforward factual evidence, that the presently disclosed and claimed product formed by the claimed electroforming process, is patentably distinct from the product which would be formed by the prior art printing process represented by Tashiro and Hirohashi. As has been shown, the prior art printing process of Tashiro and Hirohashi necessarily results in the formation of a gap, due to the presence of the binder in the printed material, which

binder material is removed during the sintering process. Since the binder material is removed, reducing the quantity of material between the insulating material layers, there must be a gap produced between the resulting conductive pattern and the overlying insulation material. Applicants have submitted evidence to show there is such a gap formed. As noted above, Fig. A of the Declaration clearly shows the formation of a gap in the inductor formed by the prior art process. Fig. B of the Declaration clearly shows that no gap is formed in the product made by the presently disclosed and claimed process. Thus, the product shown in Fig. B has been demonstrated by factual evidence to be structurally different from the product of Fig. A, at least in the specific feature that the inductor of Fig. A has a gap between the conductive pattern and the overlying insulator, and the inductor of Fig. B does not have such a gap.

Therefore, Applicants respectfully submit that the Declarations of Mr. Uriu have clearly shown that the prior art does not and cannot attain the features of the presently claimed invention.

Further, the Examiner asserted in [2] that the claim does not exclude the case where there is a gap between insulating layers when they are not in contact with the conductive pattern. Claim 1 has been amended to clearly recite that the insulation layers are in contact with each other in the areas other than where they are in contact with the conductive pattern. Thus, the claims clearly specify that there is contact, with no gaps, between the insulation layers, both at the locations of the conductive pattern and elsewhere.

With respect to the Examiner's assertion that Fig. 2 of Tashiro shows contact, it is well known that patent drawings are schematic and idealized. The fact that the two layers are shown adjacent each other does not necessarily require that the layers are in actual contact, particularly in view of the fact that there is no teaching in

YAMAP0347USD

Serial No. 09/760,950

Tashiro that the overlying insulation is in contact with the conductive pattern it is formed over.

With respect to the width and thicknesses of Tashiro, all that Tashiro discloses is a broad range of possible widths and thicknesses, but at no time does Tashiro suggest the claimed ratio. In fact, in the only example of Tashiro, the width is 180 and the thickness is 10, giving a width-to-thickness ratio of 18, which is far outside the claimed range. Furthermore, as shown by Applicants' Declaration, such a ratio as claimed is unattainable by the methods of Tashiro and Hirohashi.

With respect to the Examiner's contention in [5] that "applicant has failed to provide sufficient proof and evidence of experimentation to show that Tashiro does not show the claimed thickness to width ratio", this contention is incorrect. Applicants have submitted evidence in support of this position, in the Declarations of Mr. Uriu. The Declaration evidence has rebutted the Examiner's position, showing that the assertedly obvious claim features would not have been obtained by the prior art methods. Applicants have rebutted the Examiner's evidence and position that, based on the references, the claimed invention would have been obvious. Having done so, the burden shifts back to the Examiner. The Examiner failed to adduce any further evidence in support of his position, which is needed in order for the Examiner to rebut Applicants' evidence in the Declarations.

Accordingly, Applicants respectfully request the Examiner to withdraw the rejections of Applicants' claims over the asserted combination of Tashiro and Hirohashi.

Request for Initialed Copies of Forms PTO-1449

On January 31, 2003 and February 10, 2003, Applicants submitted supplemental Information Disclosure Statements. Applicants request the Examiner to consider the references cited in these IDSs and to provide Applicants with an initialed

YAMAP0347USD

Serial No. 09/760,950

copy of the forms PTO-1449 submitted therein. This request was included in the previous Reply to Office Action, but the requested papers were <u>not</u> provided with the Office Action to which this paper is responsive.

Conclusion

For the foregoing reasons, Applicants respectfully request entry of the present Reply, reconsideration and withdrawal of the rejections of Applicants' claims, and allowance of the application. Applicants respectfully submit that the presently disclosed and claimed invention fully distinguishes over the prior art of record for the reasons set forth herein and previously.

In the event issues arise as a result of the filing of this paper, or remain in the prosecution of this application, Applicants request that the Examiner telephone the undersigned attorney to expedite allowance of the application. Should a Petition for Extension of Time be necessary for the present Reply to the outstanding Office action to be timely filed (or if such a petition has been made and an additional extension is necessary) petition therefor is hereby made and, if any additional fees are required for the filing of this paper, the Commissioner is authorized to charge those fees to Deposit Account #18-0988, Docket No. YAMAPO347USD.

Respectfully submitted, RENNER, OTTO, BOISSELLE & SKLAR, P.L.L.

Date: October 6, 2003

Thomas W. Adams

Reg. No. 35,047

1621 Euclid Avenue Nineteenth Floor Cleveland, Ohio 44115 (216) 621-1113 (216) 621-6165 (FAX)

B:\Adams-Tom\Client Files\YAMA\347d\YAMA347D,ROA2,wpd